

ABSTRACT

A cable and connection with integrated DVI and IEEE 1394-2000 capabilities is utilized to transmit DVI signals and IEEE 1394-2000 signals over a single cable. A standard DVI cable and a DVI connector are used to integrate a DVI interface with an IEEE 1394-2000 interface. In the preferred embodiment, DVI data is transmitted over the first TMDS link, including channels 0-2, and IEEE 1394-2000 data is transmitted over two twisted pairs within the second TMDS link, including channels 3-5. Preferably, a DVI connector routes the DVI signals to or from the DVI digital signal lines corresponding to the first TMDS link to a DVI receiver circuit or a DVI transmitter circuit, as appropriate, and routes IEEE 1394-2000 signals to or from the DVI digital signal lines corresponding to the second TMDS link to an IEEE 1394-2000 interface circuit. Each connector at either end of the DVI cable then is in communication with either a DVI transmitter circuit or a DVI receiver circuit, as appropriate, to communicate the DVI video signals, and also with an IEEE 1394-2000 physical interface circuit to communicate the IEEE 1394-2000 signals.